ABSTRACT OF THE DISCLOSURE

Two electrodes parallel to each other are formed on one of two substrates, homeotropic alignment films are formed on the substrates and a liquid crystal material having positive dielectric anisotropy is injected between the substrates. When a voltage is applied to the two electrodes, a parabolic electric field between the electrodes drives the liquid crystal molecules. Since the generated electric field is symmetrical with respect to the boundary-plane equal distance from each of the two electrodes, the liquid crystal molecules are symmetrically aligned with respect to the boundary-plane, and the optical characteristic is compensated in both regions divided by the boundary-plane, thereby obtaining a wide viewing angle. The electric field does not exert influences on the liquid crystal molecules on the boundary-plane since the electric field on the boundary-plane is parallel to the substrates and perpendicular to the two electrodes; and thus, it is perpendicular to the liquid crystal molecules. Here, the polarization of the light is changed while passing through the liquid crystal layer and as a result, only a part of the light passes through the polarizing plate The transmittance of the light can be varied by controlling the magnitude of voltage applied to the two electrodes. The alignment direction of the liquid crystal molecules is changed in both regions of a bent portion of the electrodes by forming the electrodes in the saw shape in a pixel or in by pixel, and the retardation of the light is compensated, thereby obtaining a wider viewing angle.